Arizona's Common Core Summary of Changes – Mathematics – Eighth Grade

In order to help facilitate the transition to Arizona's Common Core Standards and the PARCC assessment, this document provides the changes in standards (from 2008 to 2010) and in assessments (from AIMS to PARCC). Descriptions of the document's columns are as follows.

Addressed by AIMS (2013 and 2014) – The Performance Objectives identified in the two columns below this heading are to be embedded in instruction and are assessed by AIMS in 2013 and 2014.

- **Removed from Specifically Being Tested in 2015 –** Some of the more "granular" POs from the 2008 Standard have been incorporated into the more "global" standards of Arizona's Common Core Standards by becoming examples or prerequisite knowledge for teaching the concept. This column notes the Performance Objectives that have been removed as being tested as a specific objective. The Performance Objectives identified in this column will still be assessed by AIMS in 2013 and 2014.
- **Moved to a Different Grade Level –** Performance Objectives listed in this column will move to a different grade level for Arizona's Common Core Standards and the PARCC Assessment as indicated at the end of the PO. The Performance Objectives identified in this column will still be assessed by AIMS in 2013 and 2014 at the current grade level.

Addressed by PARCC (2015) – The Performance Objectives identified in the two columns below this heading are included in the 2010 Standards and are expected to be addressed by the PARCC assessment.

- **Moved from Another Grade Level –** For alignment to Arizona's Common Core Standards and to be addressed by the PARCC Assessment, the Performance Objectives identified in this column are moved into the current grade level from another grade level as indicated at the beginning of the PO.
- **New Standards –** As noted by an asterisk in the Mathematics Crosswalks, the standards listed in this column from Arizona's Common Core Standards are new and will not match any of the POs from the 2008 Standard. These new standards are expected to be addressed by the PARCC assessment.

GRADE 8			
Addressed by AIMS (2013 and 2014)		**Addressed by PARCC (2015)**	
Removed from Specifically Being Tested in 2015	**Moved to a Different Grade Level**	**Moved from Another Grade Level**	**New Standards**
M08-S2C1-04 (2008) Determine whether information is represented effectively and appropriately given a graph or a set of data by identifying sources of bias and compare and contrast the effectiveness of different representations of data.	M08-S1C1-01 (2008) Compare and order real numbers including very large and small integers, and decimals and fractions close to zero. MOVED to 6.NS.7	M06- S1C3-01 (2008) and M07-S1C3-01(2008) and M07-S1C3-03 (2008) and MHS- S1C3-01(2008) and MHS-S1C3-04 (2008) MOVED to 8.NS.2 Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2).	8.F.2 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). *For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.*
M08-S2C3-01 (2008) Represent, analyze, and solve counting problems with or without ordering and repetitions.	M08-S1C1-04 (2008) Model and solve problems involving absolute values. MOVED to 7.NS.1c	MHS-S1C2-03 (2008) and MHS- S1C2-01 (2008) MOVED to 8.EE.1 Know and apply the properties of integer exponents to generate equivalent numerical expressions.	
M08-S2C3-02 (2008) Solve counting problems and represent counting principles algebraically including factorial notation.	M08-S1C2-01 (2008) Solve problems with factors, multiples, divisibility or remainders, prime numbers, and composite numbers. MOVED to 6.NS.4	M06-S1C1-06 (2008) MOVED TO 8.EE.2 Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that √2 is irrational.	

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Addressed by AIMS (2013 and 2014)		**Addressed by PARCC (2015)**	
Removed from Specifically Being Tested in 2015	**Moved to a Different Grade Level**	**Moved from Another Grade Level**	**New Standards**
M08-S2C4-01 (2008) Use directed graphs to solve problems.	M08-S1C2-02 (2008) Describe the effect of multiplying and dividing a rational number by • a number less than zero, • a number between zero and one, • one, and • a number greater than one. MOVED to 5.NF.5b	M07-S1C2-04 (2008) MOVED TO 8.EE.3 Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other.	
M08-S4C2-03 (2008) Identify lines of symmetry in plane figures or classify types of symmetries of 2-dimensional figures.	M08-S1C2-03 (2008) Solve problems involving percent increase, percent decrease, and simple interest rates. MOVED to 7.RP.3	MHS-S1C2-04 (2008) MOVED TO 8.EE.4 Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.	

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Removed from Specifically Being Tested in 2015	**Moved to a Different Grade Level**	**Moved from Another Grade Level**	**New Standards**
M08-S4C4-01 (2008) Solve problems involving conversions within the same measurement system.	M08-S2C1-03 (2008) Describe how summary statistics relate to the shape of the distribution. MOVED to 7.SP.3	MHS-S4C3-07 (2008) MOVED TO 8.EE.8b Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. *For example, 3x + 2y = 5 and 3x + 2y = 6 have no solution because 3x + 2y cannot simultaneously be 5 and 6.*	
M08-S5C2-10 (2008) Solve logic problems involving multiple variables, conditional statements, conjectures, and negation using words, charts, and pictures.	M08-S2C1-05 (2008) Evaluate the design of an experiment. MOVED to 7.SP.2	M07-S4C2-01 (2008) MOVED TO 8.G.1 Verify experimentally the properties of rotations, reflections, and translations:	
	M08-S2C2-01 (2008) Determine theoretical and experimental conditional probabilities in compound probability experiments. MOVED to 7.SP.8a	M06-S4C2-01(2008) and M07-S4C2-01 (2008) and M07-S4C1-05 (2008) MOVED TO 8.G.2 Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.	

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Removed from Specifically Being Tested in 2015	**Moved to a Different Grade Level**	**Moved from Another Grade Level**	**New Standards**
	M08-S2C2-02 (2008) Interpret probabilities within a given context and compare the outcome of an experiment to predictions made prior to performing the experiment. MOVED to 7.SP.7b	M06-S4C2-01 (2008) and M07-S4C2-01(2008) and MHS-S4C2-03(2008) and MHS-S4C2-04 (2008) MOVED TO 8.G.3 Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.	
	M08-S2C2-03 (2008) Use all possible outcomes (sample space) to determine the probability of dependent and independent events. MOVED to 7.SP.8b	M07-S4C2-01 (2008) and MHS-S4C2-03 (2008) and MHS-S4C2-04 (2008) MOVED TO 8.G.4 Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.	
	M08-S3C3-02 (2008) Evaluate an expression containing variables by substituting rational numbers for the variables. MOVED to 6.EE.2c	M05-S4C1-02 (2008) and MHS-S4C1-06 (2008) MOVED TO 8.G. 5 Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.	

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Removed from Specifically Being Tested in 2015	**Moved to a Different Grade Level**	**Moved from Another Grade Level**	**New Standards**
	M08-S3C3-05 (2008) Graph an inequality on a number line. MOVED to 6.EE.8	MHS-S4C3-02 (2008) MOVED TO 8.G.8 Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.	
	M08-S3C4-02 (2008) Solve problems involving simple rates. REDISTRIBUTED to 6.RP.3 a – d and 7.RP.1	M07-S2C1-01 (2008) and M07-S2C1-02 (2008) and M07-S2C1-03 (2008) MOVED to 8.SP.1	
	M08-S4C1-01 (2008) Identify the attributes of circles: radius, diameter, chords, tangents, secants, inscribed angles, central angles, intercepted arcs, circumference, and area. MOVED to HS.G-C.2		
	M08-S4C1-02 (2008) Predict results of combining, subdividing, and changing shapes of plane figures and solids. MOVED to 7.G.3		
	M08-S4C3-01 (2008) Make and test a conjecture about how to find the midpoint between any two points in the coordinate plane. MOVED to HS.G-GPE.6		
	M08-S5C1-01 (2008) Create an algorithm to solve problems involving indirect measurements, using proportional reasoning, dimensional analysis, and the concepts of density and rate. MOVED to HS.N-Q.1		